

Notice of Allowability

Application No.

09/964,900

Examiner

Clemence Han

Applicant(s)

ARAI, YASUHIRO

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment received on 02/13/2007.
2. ☒ The allowed claim(s) is/are 3-6.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

ALFUS H. HSU
PRIMARY EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claim 3-6 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The present invention is directed to an xDSL modem estimating the line characteristics of a telephone line. The prior arts in the record fail to teach or make obvious to a device comprising analyzing unit including a level measuring unit for measuring a reception level of one of a secondary dial tone and a ringing signal which are transmitted from the local switch; and a signal loss calculating unit for calculating a transmission loss by a subscriber line between the local switch and the customer premises equipment based on the reception level, and for outputting the transmission loss as a barometer for evaluating the transmission characteristic of the subscriber line within a structure of the claim. These features are claimed in the independent claim 3 and render it allowable. The prior arts in the record fail to teach or make obvious to a device comprising the analyzing unit including a signal level measuring unit for measuring a reception level of a modulated-analog signal transmitted from the local switch in response to a predetermined modulated signal in conformity with a recommendation V.90 by ITU-T; and a signal loss calculating unit for calculating a transmission loss by the subscriber line between the local

switch and the xDSL modem based on the reception level, and for outputting the transmission loss as a barometer for evaluating a line characteristic of the subscriber line within a structure of the claim. These features are claimed in the independent claim 4 and render it allowable. The prior arts in the record fail to teach or make obvious to a device comprising an evaluating unit for evaluating the transmission characteristic of the subscriber line based on the transmission loss calculated by measured current and voltage in an off-hook state and a reporting unit for sending the transmission characteristic to a network within a structure of the claim. These features are claimed in the independent claim 5 and render it allowable. The prior arts in the record fail to teach or make obvious to a device comprising the evaluating unit including a noise detecting unit for detecting noises having a reception level of a predetermined threshold value or more, from a signal which is input to the digital transmitting unit provided in the xDSL modem, the signal being separated from an analog signal by the splitter; and a periodicity examining unit for examining a periodicity of the noises detected by the noise-detecting unit and for outputting an obtained examination result as a barometer for evaluating a transmission characteristic of the subscriber line within a structure of the claim. These features are claimed in the independent claim 6 and render it allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C.H.
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